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AUTHOR Leverett, Rudy
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ABSTRACT

Noting that students must at some point begin to assume responsibility for their own learning to become mature, independent members of society, this pamphlet is designed to help students get started in taking studying seriously. The pamphlet presents: (1) 7 suggestions on when to study; (2) 6 ideas on where to study; (3) 13 suggestions on what to study; (4) 11 ideas on how to take tests; and (5) 6 suggestions on how to evaluate information. (RS)

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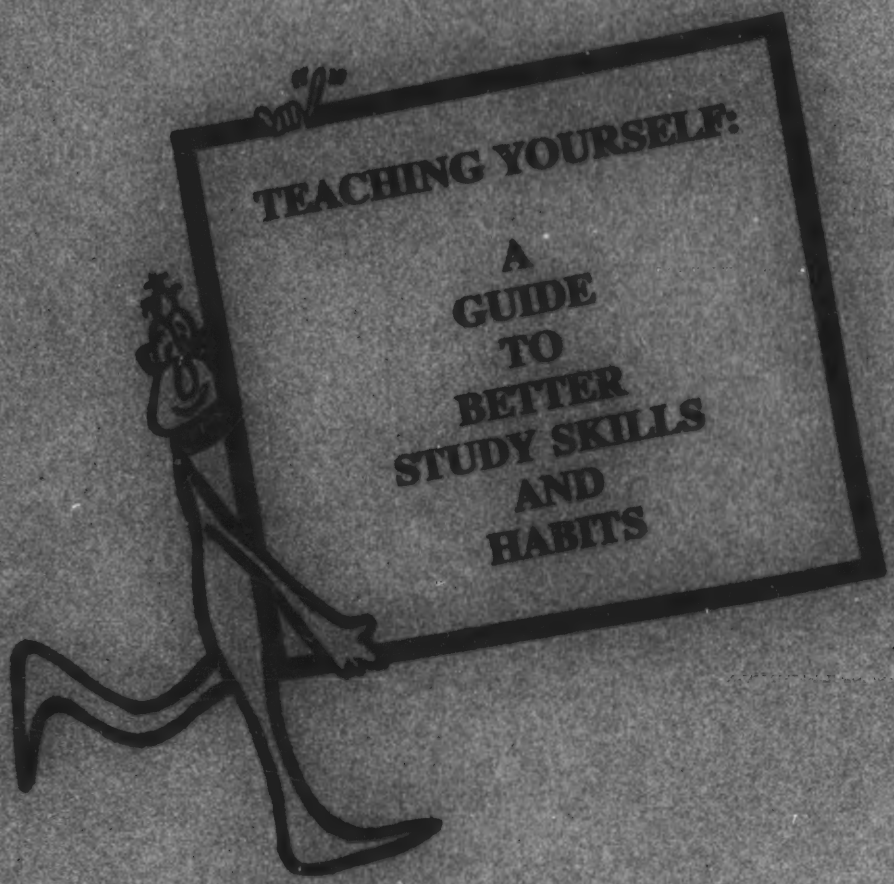
TEACHING YOURSELF:

A GUIDE TO BETTER STUDY SKILLS AND HABITS



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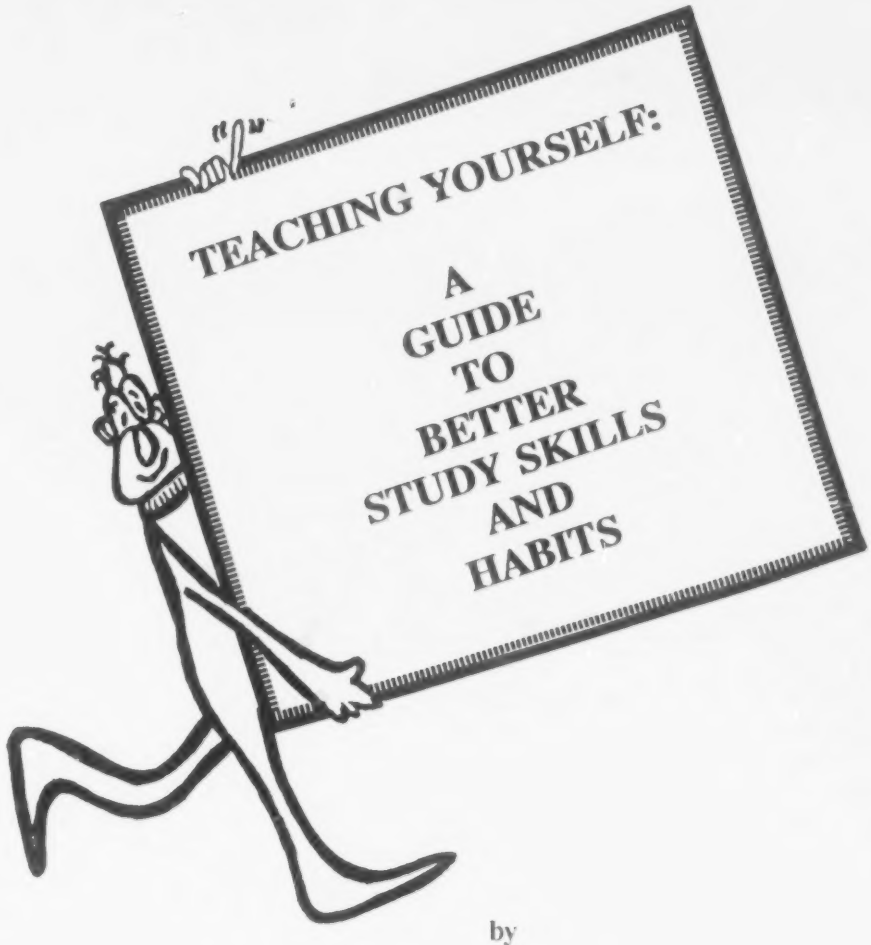

by

Dr. Rudy Leverett
Coordinator
Humanities and Foreign Languages

Jerry Pelton
Bureau Chief
Instructional Services

Darrell Loosle
Associate State Superintendent
Division of State-Federal
Instructional Services

JERRY L. EVANS
State Superintendent of Public Instruction

State Department of Education
650 West State Street
Boise, Idaho 83720

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TEACHING YOURSELF:

A GUIDE TO BETTER STUDY SKILLS AND HABITS

WHY STUDY

Human infants are born into the world totally dependent upon others for their survival. As they mature, they gradually learn more and more about the world, and about themselves as part of the world. As they learn more, they become less dependent upon others, and they need less control from others. Becoming mature and being able to take control of your own life is not only a process of getting older: **it is also a matter of learning**. At first even your learning is controlled by others--by your family, playmates, teachers, and so forth. But if you are ever to become a mature, independent member of society, you must at some point begin to **assume responsibility for your own learning**. You must learn how to teach yourself all the things you will need and want to know throughout your life. In short, you will need to learn how to study.

Accepting responsibility for your own learning is one of the most important steps you can take along the road to becoming a mature person. It will affect not only the kind of work you will do, but the kind of person you will you will be. The great psychologist, William James, once observed that, "There is very little difference between one man and another, but what little difference there is is very important." The difference that James referred to was that which allows you to become a distinct, individual person--your mind. It is through learning that you most fully realize your strictly human potential and your own special uniqueness. So, if you take yourself seriously, take your studies seriously as well. This little pamphlet is intended to help you get started.

WHEN TO STUDY

The following are some things to consider in deciding **when** to study.

1. **Study regularly**. Reserve a block of time each day for study, and stick to it. A shorter period of daily study is more effective than a marathon session once a week or just before exams. Even if you sometimes have no particular lesson assignments, use your dedicated study time for review, reading ahead in your textbooks, or just reading a news magazine or a novel.

   The point is to make study a regular part of your life, and not to break the habit once you have established it. One way of doing this is to begin thinking of yourself as a person who enjoys learning new things about the world and having something to contribute to serious conversations between mature people. That is, define

yourself to yourself as a person who, in addition to playing, relaxing, working, etc., also keeps herself or himself informed about the world and what is happening in it. That way you become one of the players of the game, not just a mindless pawn on the board for others to control and move about.

2. **Choose a time when you are fresh and alert**--during the "prime time" of your day. If you reserve only the dregs of your day for study, you will already have decided that study is the least important thing you do. And you will have little energy, interest, or resolve left to give to it.

3. **Choose a time when the house is relatively quiet** and when there is less competition for your attention. Let your family and friends know that, during this time, you are not available for telephone calls, chores, meals and so forth. If you decide to study after school, allow yourself at least a short break before beginning your study period.

   Allow yourself periodic breaks for snacks or a moment's rest during your study period. A series of twenty to thirty minute sessions with five minute breaks between them will probably be more effective than much longer sessions.

4. **Plan around foreseeable activities** such as favorite TV programs, dates, school activities, family needs, and so forth. Buy or make yourself a pocket calendar for noting important events such as test dates and due dates for term papers. When conflicts occur, ask yourself which activity has the most lasting consequence for your life.

5 **Review frequently**. A daily review of the preceding day's work will help to transfer what you have learned to your long-term memory. Then set aside an hour or two each weekend to review what you have covered in each course during the preceding week. If you have done the daily study regularly, the weekly review should not take long.

6. **Don't postpone work on long-range assignments** such as term papers and book reports. Break these into a series of short-term goals, e.g., preparing the bibliography, reading and taking notes, outlining your report, preparing the first draft, etc. By pacing your work in this manner you won't be overwhelmed with a mountain of work all at one time. If you plan your time carefully, and take care of business first, you may find that you have more free time for yourself. At least, the time you do have will be free of dread, guilt, and hassle.

7. **Hold yourself to your schedule**. Don't put things off until later; don't fudge on your study time; and don't depend upon inspiration. Exercise your willpower! Take charge of your life and your own affairs! Do what you know needs to be done rather than just sitting around depending upon your impulses and feelings or upon your parents or some else's sense of responsibility for your life.

WHERE TO STUDY

The following are a few things to consider in choosing a place to study.

1. **Find a place that is readily accessible** to you and which is out of the way of other people so that you won't be disturbed or interrupted.

2. **Eliminate distractions** such as radio, TV, stereo, telephone, etc., from your study area. **The ability to concentrate your attention and thoughts on your studies is of absolutely vital importance.** Focusing your thoughts and attention can be difficult enough without having to contend with competition from outside sources. Some students claim that background music actually helps them to study. But as a simple matter of logic, if you pay any attention to the music, you obviously aren't giving your undivided attention to the task at hand; and if you pay no attention to the music, there's no point in having it on. So, don't play childish games with yourself. Save the music for a time when you can give it the attention it deserves.

3. **Make your study place comfortable**, but perhaps not too comfortable. When your body sags, your mind is apt to sag also. If you slouch or lie down, you may become drowsy or easily distracted. But if you are uncomfortable, that in itself will be a distraction.

4. **Keep your study area neat and uncluttered**. The condition of your surroundings may reflect the condition of the mind which created them. If your study area is clean and well-organized, you will feel better about being there.

5. **Keep necessary study aids and supplies handy**, e.g., pencils, paper, a dictionary, a thesaurus, a calculator, and so forth.

6. **Make sure the area is adequately lighted**. Poor lighting will cause you to get tired more easily, and it might harm your eyes. Also make sure that the area is well-ventilated and neither too warm nor too cool. All of these can affect your ability to stay alert and to concentrate on your studies.

WHAT TO STUDY

Curious and thoughtful people study anything that interests them or that significantly affects their lives. The fact that you are a student does not necessarily mean that your studies have to be limited to the subjects taught in school or to the assignments given you by a teacher. Indeed, in order to be a responsible adult in the modern world, you must be informed on a great variety of subjects and issues. But since this pamphlet deals primarily with secondary school students and their study habits, it's concerned basically with study skills and habits in the context of formal school education.

Certain subjects are required by the state and by the local school as conditions for graduations. Other courses are necessary for advanced academic or occupational education. These kinds of considerations may affect the relative priority which you assign to different subjects in allotting study time. However this might be in your case, people who take themselves seriously always try to do the best job they can in whatever they do. The quality of the work you do says a lot about the kinds of person you are. So whatever subject you are studying, give it your best effort under the existing circumstances of available time and resources.

What are those resources? Generally they will be such things as your textbooks, class notes, completed assignments and test papers, and the materials available in your local libraries. Your teachers, parents, and friends might also be regarded as resources to assist you in your studies. A usual cycle of study might include a reading assignment from your textbook or from library materials; a class lecture or exercise on the subject; and a homework assignment. Being aware of the usual pattern of instruction of your different teachers can help you to anticipate the volume as well as the directions that your studies will take. In most cases, your study will be based on textbooks, class notes, and library materials.

HOW TO STUDY

Here are a large number of very practical suggestions which many people have found helpful in improving their study habits and learning.

1. **Pay attention and concentrate** on your studies. Again, the ability to concentrate your attention and thoughts on your work is of utmost importance. Learning to pay attention is more like acquiring a habit than like learning a new fact. It's more like learning to brush your teeth regularly than like learning the dates of the Civil War. Just knowing that you should brush your teeth to keep them healthy is helpful, but establishing the habit of actually brushing them each night and morning usually involves patient repetition and frequent reminders over time. Then, pretty soon, it becomes automatic.

   With little children, these "patient reminders" come from their parents. But as you grow older, you have to become the parent to your own "inner child." With the same patient persistence and understanding of a good parent teaching a child to brush his or her teeth every day, you can train yourself to concentrate your attention on the task at hand. This is as true of mental habits as it is of physical ones. If you are reading a book and you suddenly realize that your mind has wandered away, simply force yourself to go back to the last part you remember reading, and start over. Do this without blaming yourself, and do it over and over, no matter how long it takes. If you do this consistently and firmly, you will find, as with housebreaking a kitten, there will be fewer and fewer "accidents" until the job is accomplished.

   Here are some tips to help you concentrate your attention on your studies. Get to class on time. Sit near the front of the room away from talkers, cut-ups, and troublemakers. Keep your eyes on the teacher. Participate actively in the class.

Listen closely to what the teacher says--as though afterwards you had to explain the teacher's remarks to the class. Try to follow the ideas as well as the words of the teacher. Ask questions when you first realize that you don't understand something. Raise your hand to answer questions asked by the teacher. If necessary, go back after class for further clarification. These kinds of things will help to keep you mentally, as well as physically, involved in the class. They will also demonstrate to the teacher that you take the class seriously. And that has its advantages, too.

Students sometimes have trouble concentrating on their subjects because they don't find them interesting. And they don't find their subjects interesting because they don't pursue them to the depth where the subjects really are interesting. In fairness to these students, it must be admitted that many of them have been brought up according to what might be called the Mary Poppins theory of education: they have been led to believe that study and learning are like medicine which can only be made palatable by administering it along with a "spoonful of sugar." Unfortunately, this practice tends to trivialize the subject, to rob it of intrinsic interest, and to transfer the student's interest to the sugar-coating. The student then must rediscover for himself that learning isn't like medicine at all, and that it can be extremely interesting by itself, especially after the student gets beyond the very basic, introductory aspects of the subject.

In this respect, studying is something like swimming: you have to venture beyond the wading pool into the deeper water before swimming really becomes fun. Similarly, the study of many subjects only becomes interesting after you've spent a little time getting past the basics. And this, of course, takes will-power and patience. Those who jump in over their heads before they are ready also tend to get discouraged and to lose interest. So start with the very basic, introductory material and learn it well, but don't stop there. Work your way as quickly as possible into the more advanced and interesting aspects of the subject, even if you have to go beyond your school's textbooks. That's what the library is for. And cultivate the company of people who are interested in learning and talking about the subjects that concern you.

Most of all, **don't be afraid to really push yourself**, to come to grips with a subject and struggle with it over an extended period of time. For an adult, playing cards with a child is not very interesting because the game holds no challenge. But with an opponent who can challenge your skills, card games can be intensely interesting. That's how it is with studying. If the subject matter is too basic or too simple, it may not hold your interest and you may have trouble concentrating on it. And finally, a mature person does not require that everything he does be amusing, entertaining, or even interesting. Mature people accept the fact that they often must do things simply because doing them is important. Refusing to accept this kind of responsibility is simply refusing to grow up.

2. **Make sure that you understand assignments**. Write them down. A preprinted form for recording assignments may be helpful. Follow instructions carefully and pay attention to details.

3. **Read all reading assignments**. They may help a great deal in further understanding what was said in class, and they may contain new material.

4. **Turn in all homework assignments on time**. Make sure that your work looks neat. Take pride in your work as it reflects the kind of person you are. Just following the four rules given so far can make a dramatic improvement in your grades, your self-confidence, your self-respect, and your attitude toward school.

5. **Use the library**. Many people either continually starve their minds of information or feed them a steady diet of the garbage of the information world, i.e., rumors, hearsay, uninformed opinion, propaganda, sensationalism, superstition, and so forth. This is all the more tragic in view of the easy availability of accurate, reliable information in most parts of this country. Almost every secondary school has a library. And no matter how small these may be, they have access to the collections of the largest libraries in America. As a result of this network of libraries, virtually any information that has been published in the world is available to you. No skill you could learn is of more basic and lasting value than those involved in using the resources of the library. And no habit is more rewarding throughout your life than using the library to keep yourself informed on matters that affect your life. You can find information on any subject presented at a level that you can understand, and you can read and study it at your own pace. If you need help in finding something, librarians take a lot of pride in offering help in ways that don't violate your right to privacy or pass judgment on your interests and tastes.

6. **Don't worry about not being as "smart" as someone else**. Most students, regardless of how smart they are, don't begin to use the mental abilities they have. Students of average ability who are serious about their school work and who are careful, deliberate, thorough, and persistent in their efforts often perform better in school and in life than do students of above average ability who lack these character traits. Use what you have to the fullest, and you won't have to worry about how smart anyone is.

7. **Don't be afraid of making mistakes**. A mistake is a golden opportunity to learn. Learning the correct answer to a question or problem consists in large part of learning which of the plausible answers are incorrect.

8. **Take good notes--and use them**. Just the act of taking notes is helpful. It requires you to pay attention; and in writing the information on your note paper, you are also writing it down in your memory. You can put this bit of psychology to work for you even further by consolidating and organizing your notes later on during your regular study period. Review and repetition help to transfer information from your short-term to your long-term memory. By drawing together notes on related material, clarifying and expanding these while your memory is still fresh, relating them to what you already know, placing them in logical order, and writing them down, you fix them permanently in your understanding and in your memory.

Talking about what you have learned with your family, friends, or a study partner can also help you to remember. In compiling your notes, it is sometimes helpful to

paraphrase ideas, using your own language. In doing so however, don't underestimate the importance of learning the new terminology of the subject you're studying. The special language of a subject often carries the key ideas and concepts of that subject.

a. Use a separate notebook for each class. Date each page of notes. Leave a wide margin on one side of your page, or leave alternate pages blank. This extra space can be used later in adding related information from your textbook or from library reference works.

b. Use abbreviations, shorthand expressions, memory jogging phrases, etc. If you try to write out everything the teacher says, you will quickly fall behind and get discouraged. Pick out the most important points and note them, using such abbreviations as: e.g., for example; i.e., that is, or meaning; w, with; w/o, without. (U cn wrk out mny addtl xmpls of ur own.) Through practice this will become second nature. Later, you can flesh out these notes while the information is still fresh in your mind.

c. Note all new words and expressions and their meanings. Learn to use the "language of the subject" and you will have learned the subject itself. Look for opportunities to actually use the new words yourself. After two or three such uses, the language will be yours forever.

d. Ask yourself: If I were writing a test of this material, what questions would I include? These will be important points to include in your notes. Note also points repeated or stressed by the teacher.

e. Most teachers as well as books, magazine articles, TV programs, etc., present their information in some kind of definite, carefully thought out pattern. Look for this pattern and it may help you to understand the subject and to make an outline of it in your notebook. Outlining involves grouping similar and related materials together in the same and related categories and sequencing these categories in such a way as to show the relationships between them. Outlining is a good way to get the "big picture" of the subject. When you have this kind of an overview of the subject, the specifics will make more sense, because their relationships with other specifics and with the whole subject will be more obvious. Understanding how a carburetor works, for example, is much easier if you know generally how an internal combustion engine works.

f. Indicate in your notebook those ideas which the teacher emphasized or spent a lot of time on. They may be keys to understanding the subject under study, and they are good candidates for test items.

g. Copy examples which the teacher puts on the chalkboard. Examples often summarize a lot of information and they are easier to understand and remember; and if the teacher thought an example important enough to write on the chalkboard, it may turn up later as an exam question.

h. In taking notes from written material, look for topic or summary sentences. These often occur at the beginning and end of paragraphs. It is often convenient to have your own copy of written material. With your own copies you can use highlighter felt-point markers to identify important sentences and passages. This is quicker than pausing to take notes, and it allows you to come back later and summarize what you read by referring to the highlighted passages.

i. Pay attention to charts, graphs, tables, illustrations, etc., in what you read. They often summarize a lot of information in a useful way and show interrelationships between different items of information.

9. **Don't allow yourself to fall behind**. Falling behind the rest of the class can be demoralizing and frustrating. And trying to catch up by reading a large amount of new material just before an exam can be very difficult. If you get behind or are just lost in a subject, go back to the beginning and retrace your progress until you find where you began to get stuck. Then try to narrow the problem down until you can say exactly what it is that you don't understand. Often it will be something as simple as not knowing the definition of a word, or needing an example or two of how something looks in actual practice. Arrange a conference with your teacher to get yourself back on track.

Sometimes it is a particular person's way of explaining an idea that fails to communicate. Ask a different person to explain it. Sometimes it is helpful to go to the library and get one or more introductory or children's books on the subject that is giving you trouble. These introductory books usually break a subject down into its very basic ideas and principles. Seeing how different writers break the subject down and explain the key ideas can sometimes be very helpful.

10. **Think about what the teacher says and about what you have read**. Don't just try to remember a lot of words. "Thinking" sometimes means picturing in your mind how something looks. But a "picture's" being a picture of something involves language. So "thinking" sometimes means something like "silently talking to yourself." Try talking to yourself about your studies. When you don't quite understand something, try to explain or clarify it to yourself just as though you were trying to explain it to someone else. This will at least help you to focus more precisely on the specific aspects of the matter that is giving you trouble. And that will make it much easier for you to ask someone for the help you need, or to look up the answers to specific questions in your text or other books.

When you do understand a new idea, try to elaborate it or expand upon it to yourself--to see what implications it has, or what can be inferred from the new idea, fact, information, etc. To do this, ask yourself: So what? What difference does it make to anything? If this were true, what would things be like? What would be the difference between this being true and its being false? How could anyone know that this is true? If this is the case, what consequences can be expected or predicted? What else would be affected? What change of any kind would result?

Ask yourself: What is this thing or event a part of? What are the parts of this thing or event? What kind of thing or event is this? What are the different kinds or types of this thing or event? Do these things really belong together in the same class or category? Remember that classes and categories are created for different purposes; and things that belong together for one purpose may not belong together in a category that was created for a different purpose. Walter Cronkite, Mother Teresa, Eudora Welty, a cockroach, and an oak tree all belong together in the category of living things, but not in the categories of animals, mammals, human beings, or great Americans. Thinking about a subject or topic often begins with this kind of careful observation and analysis of the topic into its separate parts and the relationship between those parts.

In thinking about what you hear and read, other questions that you might ask yourself--or other people--are: What were the causes of this? What assumptions is the speaker or writer relying on in making this claim? What reasons are given in support of what is being claimed? What are some examples of this? What would this look like in actual practice? How is this phenomenon or event like others that I know about? How is it different? What was going on in the world at the same time this was happening? Who were the contemporaries of this person, and who or what was influenced in what way by him or her? What was changed by this person or event?

Ask yourself: How would I go about teaching this idea or concept to another person? In answering this question you will be teaching yourself the concept. Studying and teaching oneself are basically the same thing. If you learn how to study effectively, you will learn not only the subject you are studying, but something even more important: you will learn how to teach yourself the things you will need to know throughout your life in order to be a responsible, fulfilled adult.

In answering these and similar questions you will get ideas and insights of your own. Jot these down in the margin of your notebook. Later, if you are asked to explain and discuss the subject, your own ideas and insights will constitute part of that "discussion."

11. **Relate what you learn in one class with what you learn in others**. For example, does your study of the Romantic Period in American history help to explain some of the things you learn about romantic literature?

12. **Read a lot**. Reading regularly will help you to stay informed on a wide variety of topics. It will stimulate your own ideas. And it will improve the quality of your writing. Many professional writers say that they learned to write by reading the works of others. Remember that your school work is often graded as much on the basis of how well you express what you know as it is on the basis of the content of what you write and say.

But, most important of all, written language is very different from spoken language. For a variety of reasons, abstract, generalized, objective thought is more characteristic of written than of spoken language. Through reading and writing a lot,

we internalize the grammar, vocabulary, syntax, and logical rules and conventions of written language, and thereby more fully develop our intellectual powers.

13. **Eat properly and get plenty of physical exercise and rest**. Set yourself a reasonable time to be in bed, and stick to it. You can't abuse your body and expect that your mind will not be affected by it.

HOW TO TAKE TESTS

Like it or not, taking tests is a necessary and important part of being a good student. Test results often have a greater influence on final grades than do daily assignments. Treating tests seriously, therefore, makes good sense. The following are a few simple tips for improving your performance on tests.

1. **Prepare yourself ahead of time for tests**. Regular study during the course leading up to the test is the best possible kind of preparation. If this is done, a short review of your notes, daily work, handouts, and quizzes should be all you need to prepare for the exam. Some students find it especially helpful to get together with a friend and to quiz each other on the material to be covered by the test. A good night's sleep and a hearty breakfast the next morning will then be more helpful than a frantic orgy of last minute cramming for the test.

2. **Approach the test in a calm, deliberate, and businesslike manner**. When you reach the testing room, the time for anxiety is long past. Ready or not, you will have to do the best you can, and anxiety only gets in the way. Work steadily, but don't rush. You have plenty of time. Don't worry about how quickly some of your classmates seem to be working. If you feel yourself getting anxious, take a couple of deep breaths and exhale slowly. You'll find it helps to control the tension. Even if you are not as well-prepared as you would like to be, you will do better on the test by remaining calm, alert, attentive, and careful.

3. **Essay questions** usually carry more points than do objective questions, **so make sure that you understand exactly what you are expected to do**. For example, "Compare and contrast . . ." does not mean the same thing as "Describe and discuss . . ." or "Define and give examples of . . ." Read the essay question very carefully; underline the important words; and do exactly as you are told. If the test item tells you to compare and contrast something, your response should contain at least two parts: a discussion of the similarities, and a discussion of the differences. Essay questions are intended to assess your ability to organize and present information as well as your knowledge of a subject; so don't forget to use your best writing skills.

4. **Thumb through the entire test** to get an idea of its length, the amount of time required, and which parts carry the most points. **Allocate your time accordingly**.

5. **Make sure you understand how the test is scored**. If you are penalized for guessing,

5. **Make sure you understand how the test is scored**. If you are penalized for guessing, you may be better off to skip those items about which you are uncertain.

6. **Answer the easy questions first**, checking those about which you are uncertain. Later you can come back to the checked questions and spend more time on them.

7. **Try to understand the intent of the questions**. Be careful about reading interpretations and qualifications into them.

8. **Try to answer multiple-choice questions** from your own knowledge before reading the possible answers given on the test. Then look for the choice which best matches your own answer.

9. **Consider all of the answer options** provided before making a choice. Eliminate the obviously incorrect responses and focus your attention on the real possibilities. When several options look like good answers, compare them to determine exactly what makes them different. That difference should help you to choose one over the other.

10. When responding to essay questions, **jot down the major points** of your response on a sheet of scratch paper or in the test margin, then develop your response around those points. Even if you lack the time to complete the response, the test grader can see the points that you intended to address.

11. If you have time left over, **don't hand your test in early**. Instead, **use the extra time to double check your answers**, especially your answers to the more difficult questions.

HOW TO EVALUATE INFORMATION

A credulous person is one who easily accepts and believes almost anything anyone tells him or her. A gullible person is easily tricked or deceived, often because he or she is credulous. A superstitious person is one who believes improbable, illogical, and outlandish tales and explanations, in part because he or she is gullible, and in part because he or she enjoys being titillated, amazed, and astonished by the mysterious, magical, and sensational. Such people are usually ignorant or, which amounts to the same thing, extremely uncritical of the information they come by. They make no distinctions between fact and opinion, speculation, conjecture, and hearsay; or between truth and propaganda, dogma, sensationalism, and superstition. Such people are intellectually immature. They are the natural prey of unethical politicians, advertisers, cultists, confidence men, and other types of mind seducers. A decent respect for truth and honesty commits educated people to basing their beliefs on evidence, reasons, and arguments; to rejecting, or reserving judgment on claims that are inadequately supported; and to reevaluating their own views in the light of new or stronger evidence and arguments.

A very large part of what we mean by an educated person is one who is reliably informed on matters of public and personal importance and interest. Such a person is able

to separate his or her intellectual understanding of how the world actually is from emotional and imaginary versions of how he or she would like it to be. One doesn't become reliably informed by accident. Nor does information and knowledge simply grow and blossom in the mind naturally. It has to be actively sought out and carefully evaluated. Because an educated person always tries to base judgments and values upon good reasons, solid evidence, and relevant facts, he or she is always critical of what is offered under the label of information and knowledge.

Being critical, of course, doesn't mean being a nit-picker or fault-finder; nor does it mean being negative or rude. Being critical is not inconsistent with being open-minded and interested in new ideas and new discoveries. Being critical simply means that when someone offers a statement, assertion, or claim as fact or truth, you have a right to ask for the reasons, evidence, grounds, or other justification behind that statement or assertion. Being critical means only that you are not naive, credulous or superstitious: it does not mean that you always begin with the assumption or suspicion that others are wrong, devious, or malicious. Obviously, you don't have to be offensive to those who try to impose their unsupported views upon you, though occasionally that is the most efficient way of discouraging an outright snake oil peddler.

The following are a few questions to which you might seek answers when you are trying to decide how much credence to give to something you have heard or read.

1. **Who is the author or source of the claim being made**? What special study, training, or experience does he or she bring to the subject? What organizations, movements, causes, etc., is the author affiliated or associated with? Information on the writer may be available in such reference works as the Dictionary of American Biography, Dictionary of National Biography, Webster's Biographical Dictionary, and Current Biography Index. Other sources may be found by consulting Biographical Dictionaries Master Index.

2. **Who is the publisher or sponsor of the work or presentation**, and what is his or her reputation? For example, the National Enquirer has a different reputation for accuracy and fairness than does the New York Times. And even when accuracy is not at issue, different publications sometimes have different biases or points-of-view on certain subjects. Time and Newsweek, for example, often cover much of the same subject matter, but Time is likely to present it with a more conservative interpretation than does Newsweek. Knowing the editorial slant of the publisher can be important when deciding about the relative significance of a particular account or argument. Such publications as Magazines for Libraries may be helpful in this respect.

3. **Are the sources of quotations, studies, facts, and statistics offered in support of the argument adequately identified**? Are the supporting data relevant to the point being argued? Are the supporting data reasonably timely?

4. **What is the apparent main purpose of the publication or presentation**? Is it to provide information, to entertain, to titillate, to sell something, to get votes, or to attract converts? Does the author present a reasoned argument for his case based

upon demonstrable facts, solid evidence, or other good justification? Does the author present all sides of the issues fairly? Does he present counter-arguments in their strongest forms and refute them convincingly? Or does he appeal primarily to your emotions, prejudices, and loyalties?

5. **What have other authorities said or written on the subject**? Except for matters of personal taste and preference, more than one interpretation or point-of-view is usually possible, so it is a good idea to reserve judgment until you have heard more than one side of a story or argument.

   If the presentation or publication that concerns you is in book form, find out what other readers have thought of it. For other evaluations of books consult Book Review Index, Book Review Digest, New York Times Index, Current Book Review Citations, and the indexes to special fields of study such as the Education Index and the Humanities Index.

6. **When reading or listening to a presentation, ask yourself** such questions as the following.

   a. **What kind of an issue is being discussed**? Is it political, scientific, psychological, moral, aesthetic, semantic, administrative, religious, etc.? Are the reasons and evidence offered relevant to the claims being made about this issue? For example, is the writer or speaker trying to prove or disprove what is basically a scientific or empirical claim on the basis of inappropriate political, aesthetic, moral, or religious evidence or reasons?

   b. **What precisely is this person saying**? Is he saying anything specific, or is he only speaking loosely or in broad or vague generalities? What, specifically, is being claimed that is questionable? False or debatable claims are sometimes woven into long and complex arguments like a weak thread in an otherwise sound piece of cloth. So you often have to tease an argument apart into its constituent parts to find its flawed elements. What sorts of things would count in favor of the claims being made? What kinds of things would count against them? How would you go about collecting the information or evidence needed to prove or disprove the claims being made? If the evidence is not collectable, is it merely a practical matter such as the evidence being located on Mars? Or is the "evidence" in principle uncollectible, e.g., by requiring someone to travel faster than the speed of light or violate some other natural law?

   c. If he is making a specific claim, **what specific evidence or reasons** does he give in support of that claim? Are his reasons and evidence any more believable than the conclusions he draws from them? Are there other, more plausible, interpretations or explanations of the evidence offered?

   d. **Is the claim in question really a claim of fact**, or is it, perhaps, only a statement of some kind of logical or grammatical rule or convention? Examples: Dogs don't commit crimes. You can't win a tennis game by only

one point. Every English sentence has a subject and a predicate. All bachelors are unmarried men. Plants can't feel pain.

e. **Has the writer or speaker considered all of the relevant evidence** and arguments, or only that part which tends to support his position?

f. **What assumptions, expressed or not, lie behind the claims** being made? What would have to be the case in order for the claims offered to be true or believable?

g. Assuming that what is claimed were true, **what would logically follow from it**? What could reasonably be expected or predicted on the basis of that truth? What difference would it make? Has such a difference been demonstrated? Could it be demonstrated? What would be involved in demonstrating the difference?

h. **Is there a different sense or context**, or a different way of thinking about the questionable claims or assertions which would make them more meaningful? For example, legends are sometimes asserted to be factual when their real importance lies in their moral or artistic symbolism rather than their alleged historical accuracy.

i. **Is the writer or speaker using words with their ordinary meanings**, or is he specifying his own definitions for certain terms and thereby making his claims appear to be more believable? For example, psychological testers and surveyors sometimes claim that they are able to measure what is meant by such words as "intelligence" and "aptitude." Elaborate "instruments" such as the Stanford-Binet Intelligence Scale and the Scholastic Aptitude Test have been developed which some psychologists and educators claim provide measurements of intelligence and scholastic aptitude. The problem with such claims is that what the tests actually "measure" is what the tests themselves define as being intelligence and scholastic aptitude, not what intelligence and scholastic aptitude mean in ordinary speech. These terms are used with a rich variety of nuances in ordinary speech, some of which do not lend themselves to exhaustive, numerical definition. Thus, you have to accept the test-maker's definition of intelligence and aptitude before his arguments about the comparative degrees of intelligence and aptitude of different people even make sense.

If you will follow the suggestions offered in this little guide, you can confidently expect a substantial improvement in your grades at school. But, more importantly, you will enjoy school more; you will feel better about yourself; and you will have taken a giant step in the direction of becoming a more mature, independent, and responsible adult.

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Jerry L. Evans
State Superintendent of Public Instruction
650 West State Street
Boise, Idaho 83720
(208) 334-2113

or to the:

Director, Office of Civil Rights
Department of Education
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